

NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A12030014

Page 1 of 1

NSF OIG received an allegation that the Subject¹ submitted an NSF proposal² containing copied text. Our inquiry determined that almost all of one section was copied from an article with the verb tense changed from past to present tense. We determined there was sufficient evidence to proceed with an investigation.

We conducted our own investigation because the institution³ was a small business. We concluded, based on a preponderance of the evidence, that the Subject knowingly committed plagiarism in two NSF proposals,⁴ and that the plagiarism constituted a significant departure from accepted practices of his professional community. We recommended actions to be taken to protect the federal interest. The Senior Advisor to the Director concurred with our recommendations.

This memo, the Report of Investigation, and the letter from the Senior Advisor to the Director to the Subject constitute the case closeout. Accordingly, this case is *closed*.

1 2

⁴ The initial proposal identified and

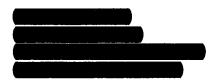
NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



JAN 1 3 2014

CERTIFIED MAIL --RETURN RECEIPT REQUESTED



Re: Notice of Research Misconduct Determination

Dear Dr.

You submitted two proposals to the National Science Foundation entitled,

and

As documented in the

attached Investigative Report prepared by NSF's Office of Inspector General ("OIG"), these proposals contained plagiarized material.

Research Misconduct and Proposed Sanctions

Under NSF's regulations, "research misconduct" is defined as "fabrication, falsification, or plagiarism in proposing or performing research funded by NSF ..." 45 CFR § 689.1(a). NSF defines "plagiarism" as "the appropriation of another person's ideas, processes, results or words without giving appropriate credit." 45 CFR § 689.1(a)(3). A finding of research misconduct requires that:

- (1) There be a significant departure from accepted practices of the relevant research community; and
- (2) The research misconduct be committed intentionally, or knowingly, or recklessly; and
- (3) The allegation be proven by a preponderance of evidence.

45 CFR § 689.2(c).

Your proposals contained verbatim and paraphrased text copied from multiple source documents. By authoring proposals that copied the ideas or words of another without adequate attribution, as described in the OIG Investigative Report, you misrepresented someone else's work as your own. Your conduct unquestionably constitutes plagiarism. I therefore conclude

that your actions meet the definition of "research misconduct" set forth in NSF's regulations.

Pursuant to NSF regulations, the Foundation must also determine whether to make a finding of misconduct based on a preponderance of the evidence. 45 CFR § 689.2(c). After reviewing the Investigative Report, NSF has determined that, based on a preponderance of the evidence, your plagiarism was committed knowingly and constituted a significant departure from accepted practices of the relevant research community. I am, therefore, issuing a finding of research misconduct against you.

NSF's regulations establish three categories of actions (Group I, II, and III) that can be taken in response to a finding of misconduct. 45 CFR § 689.3(a). Group I actions include issuing a letter of reprimand; conditioning awards on prior approval of particular activities from NSF; requiring that an institution or individual obtain special prior approval of particular activities from NSF; and requiring that an institutional representative certify as to the accuracy of reports or certifications of compliance with particular requirements. 45 CFR § 689.3(a)(1). Group II actions include award suspension or restrictions on designated activities or expenditures; requiring special reviews of requests for funding; and requiring correction to the research record. 45 CFR § 689.3(a)(2). Group III actions include suspension or termination of awards; prohibitions on participation as NSF reviewers, advisors or consultants; and debarment or suspension from participation in NSF programs. 45 CFR § 689.3(a)(3).

In determining the severity of the sanction to impose for research misconduct, I have considered the seriousness of the misconduct, and our determination that it was committed knowingly. I have also considered the fact that your misconduct was not part of a pattern of misconduct, and had no impact on the research record, as well as other relevant circumstances. 45 CFR § 689.3(b).

After assessing the relevant facts and circumstances of this case, I am taking the following actions against you:

- (1) From the date of this letter through January 1, 2016, you must provide certifications to the OIG that any proposal or report you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material; and
- (2) By January 1, 2015, you must attend a responsible conduct of research training program and provide documentation to the OIG of the program's content. The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include a discussion on citation practices.

The certifications and training documentation should be submitted in writing to OIG, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

Procedures Governing Appeals

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 CFR § 689.10(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. If we do not receive your appeal within the 30-day period, this decision will become final.

For your information, we are attaching a copy of the applicable regulations. If you have any questions about the foregoing, please call at (703) 292-8060.

Sincerely,

Fae Korsmo Senior Advisor

Enclosures

- Investigative Report
- 45 C.F.R. Part 689

National Science Foundation Office of Inspector General



Report of Investigation Case Number A12030014 July 31, 2013

This Report of Investigation is provided to you FOR OFFICIAL USE ONLY.

It contains protected personal information, the unauthorized disclosure of which may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a. This report may be further disclosed within NSF *only* to individuals who *must* have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. This report may be disclosed outside NSF only under the Freedom of Information and Privacy Acts, 5 U.S.C. §§ 552 & 552a. Please take appropriate precautions handling this report of investigation.

Executive Summary

Allegation:

Plagiarism

OIG Inquiry:

OIG identified three sources from which 46 lines, one figure, and six references were apparently copied into one NSF proposal. The Subject acknowledged the proposal contained inadequately cited text.

OIG

Investigation:

OIG identified another NSF proposal that contained 50 lines, one figure, and three embedded references copied from five sources.

OIG concluded, based on a preponderance of the evidence, that the Subject knowingly committed plagiarism, and that the plagiarism constituted a significant departure from accepted practices of his professional community.

OIG

Assessment:

- The Act: The Subject plagiarized 96 lines, two figures, and nine references from eight sources into two proposals.
- Intent: The Subject acted knowingly.
- Standard of Proof: A preponderance of evidence supports the conclusion that the Subject committed plagiarism.
- **Significant Departure:** The Subject's plagiarism represents a significant departure from accepted practices.
- Pattern: Two NSF proposals and three DOD proposals submitted by the Subject contain plagiarism.

OIG

Recommendations:

- Make a finding of research misconduct against the Subject.
- Send the Subject a letter of reprimand.
- Require certifications from the Subject for a period of 2 years.
- Require certification of attending a responsible conduct of research training program within 1 year.

OIG's Inquiry

OIG conducted an inquiry into an allegation that the Subject¹ submitted an NSF proposal (Proposal 1²) containing copied text. Our initial analysis found 46 lines, one figure, and six embedded references apparently copied from three sources.³ We noted that, while most of the material constituted background information, almost all of one section was copied from an article with the verb tense changed from past to present tense.⁴

We contacted the Subject about the allegation.⁵ In his response, the Subject said:

When we prepared the final version of the proposal submitted to NSF, we switched the software to OpenOffice For some reason, some reference links were broken and some references were messed up and missing.

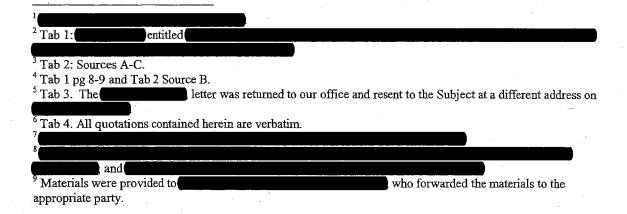
Nevertheless, it was my fault and I should have been more careful. As I conveyed my sincere apology to you through the phone, I feel very bad about the unintended mistakes and my carelessness. As I told you, this proposal is my FIRST one and the ONLY one I have submitted to NSF and I will personally assure you that those mistakes will never occur again in future.⁶

The Subject's response did not dispel the allegations as he acknowledged Proposal 1 contained inadequately cited text. We determined there was sufficient evidence to proceed with an investigation.

OIG Investigation

Because the institution is a small business, we conducted our own investigation rather than refer the matter to the institution.

Proposal 1's Current and Pending Support section listed an awarded Department of Defense (DoD) proposal. We obtained the proposal for the active award and two other DoD proposals. We identified potential plagiarism in the three proposals and provided the information to DoD for its own review.



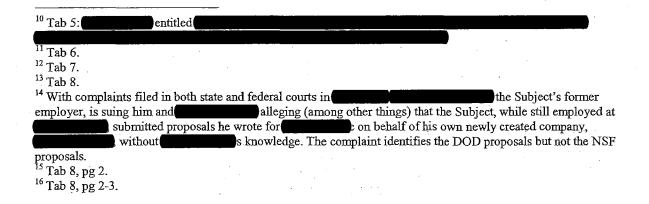
Most crucially, contrary to the Subject's contention that Proposal 1 was his first and only NSF proposal, he had in fact submitted another NSF proposal (Proposal 2) a year before Proposal 1. 10 Proposal 2 contains 50 lines, one figure, and three embedded references apparently copied from five sources. 11 The chart below illustrates the copied material in Proposals 1 and 2.

	Proposal 1	Proposal 2
Source A		
(book chapter)	9 lines	
Source B	28 lines, 1 figure,	
(article)	4 embedded references	<u> </u>
Source C	9 lines,	
(article)	2 embedded references	
Source D	+,	
(DOD proposal)		17 lines
Source E		12 lines,
(article)		2 embedded references
Source F		10 lines, 1 figure,
(article)		1 embedded reference
Source G (article)		3 lines
Source H (article)		8 lines

We informed the Subject of our investigation and asked him to address his claim that Proposal 1 was his first and only NSF proposal, the newly identified copied text in Proposal 2, and additional questions.¹²

In his response,¹³ the Subject explained that when he received our inquiry letter he was facing litigation with another company¹⁴ and was overwhelmed with anxiety.¹⁵ He said:

As the results, I reacted based on my memory that we had only submitted one proposal to NSF. Since the first proposal we submitted to NSF occurred almost one year before and it was turned down without review, I had no memory of it.... I did not intend to lie or make any false statement – all my submitted proposals are recorded on the government side and it doesn't make any sense for me to lie. But I should have checked our records before I responded to NSF. It was my unintended mistake and I feel very sorry about it. ¹⁶



SENSITIVE SENSITIVE

Regarding the material we identified in Proposal 2, he acknowledged he "copied material from the documents into my proposal unknowing that I was violating the research ethics." He said he personally prepared Proposals 1 and 2 without writing or editing assistance. ¹⁸

The Subject explained that, until he received our investigation letter, he had not realized his "long-held misconception" regarding plagiarism. ¹⁹ He said he had "never been instructed regarding the definition of plagiarism or engaged in self-study on the subject," never took a grant writing course, and did not use any particular style manual. ²⁰ He said he learned about plagiarism through "some casual conversations with peer researchers," during which he "was told that as long as you don't explicitly state referenced or copied materials as your own work, you can use the materials freely." ²¹

However, when he received our investigation letter, he said he "sensed something was wrong" and "did some preliminary search using Google on the research ethics." He explained:

I was shocked to find out that I had held a misconception for so many years. ... Immediately after I realized my this misconception, I took this issue very seriously and suspended all the proposal writing activities. Furthermore, I believe there must be more than this misconception about this topic for me to pick up. So I decided that before I take systematic training on the topic of research ethics, I will not write any more proposals. Please give me a chance to correct this and any other misconceptions that I might have. ... I believe with the correct concept and information, this will not happen any more, because I cherish my research career and I don't want it ruined by this misconception and unintentional mistakes. ²³

In his second response the Subject did not contest having plagiarized material in Proposals 1 and 2. While his first response attributed the plagiarism to computer software, his second response attributed it to misunderstanding plagiarism.

The Subject's current CV²⁴ describes his research, educational, and professional background. Although the Subject received his Bachelor's degrees outside the U.S., ²⁵ he received his M.S. and Ph.D. degrees at a preeminent U.S. research university. ²⁶ Additionally, since 2002, all of the Subject's employment, including a position as a postdoctoral scholar, ²⁷ was in the U.S. The

Tab 8, pg 3.

18 Tab 8, pg 3.

19 Tab 8, pg 1.

20 Tab 8, pg 4.

21 Tab 8, pg 1.

22 Tab 8, pg 1.

23 Tab 8, pg 1.

24 Tab 8, pg 6-7.

25

26

27

He returned to as in

SENSITIVE SENSITIVE

Subject served as primary author on 10 and co-author on 6 publications in English-language publications.²⁸ and is a co-inventor on three U.S. patents.

To determine the standards of the Subject's research community, we first examined the standards of his previous employers. We noted that none of the websites of the companies at which he was employed²⁹ include research misconduct policies.

The university where the Subject carried out his graduate research has an honor code which clearly prohibits plagiarism.³⁰ The university where he worked as a postdoc for two years, and where he returned as an employee thereafter, has a Policy on Integrity in Research that similarly clearly prohibits plagiarism.³¹

In addition, two of the four professional societies in which the Subject reported membership in his NSF proposal biographical sketches have established ethical standards. 32 We found that the website for the society in whose journals and at whose conferences the Subject most frequently published or presented includes an author resource center that contains ethical guidelines discussing such topics as plagiarism.³³ The second society's website contains a whole section defining plagiarism, which states that "Plagiarism in any form is unacceptable and is considered a serious breach of professional conduct, with potentially severe ethical and legal consequences.",34

Given the field in which the Subject conducts research, his graduate school's and postdoctoral institution's clear standards, and the standards of his professional societies, it is difficult to credit his claims to have been unaware that plagiarism is unacceptable.

OIG's Assessment

A finding of research misconduct by NSF requires that (1) there be a significant departure from accepted practices of the relevant research community; (2) the research misconduct be committed intentionally, knowingly, or recklessly; and (3) the allegation be proved by a preponderance of the evidence.³⁵

²⁸ Because all 16 publications have multiple authors, we did not examine them for plagiarism as any copied text identified would be inconclusive regarding its author. ³² Tab 1, pg 23, and Tab 5, pg 21. The guidelines include Although the guidelines post-date the Subject's self-reported involvement with the society, a review of the site as it appeared in http://archive.org/web/web.php) found it contained versions of both documents.

^{35 45} C.F.R. § 689.2(c).

The Acts

Under NSF's regulation, "Plagiarism means the appropriation of another person's ideas, processes, results or words without giving appropriate credit." The Subject plagiarized 96 lines, two figures, and nine references from eight sources into two NSF proposals. OIG concludes the Subject's actions constitute plagiarism, as defined by NSF. In offering material composed by others as his own, the Subject misrepresented his own efforts and presented reviewers with a false representation of his knowledge of the research area.

The quantity of the Subject's plagiarism constitutes a significant departure from accepted practices of his professional community.

Intent

We conclude the Subject acted knowingly in plagiarizing material. Even though the Subject now operates within a very small business rather than academic context, he spent seven years in top-tier U.S. research institutions as a graduate student and postdoc, and then seven years working for U.S. research companies. The Subject's claims that he lacked knowledge about appropriate citation practices are not plausible in light of his experience. We therefore conclude the Subject's actions were knowing.

Standard of Proof

OIG concludes that the Subject's actions and intent were proven based on a preponderance of the evidence.

OIG concludes that the Subject, by a preponderance of the evidence, knowingly plagiarized, ³⁷ thereby committing an act of research misconduct. ³⁸

OIG's Recommended Disposition

When deciding what appropriate action to take upon a finding of misconduct, NSF must consider:

(1) How serious the misconduct was; (2) The degree to which the misconduct was knowing, intentional, or reckless; (3) Whether it was an isolated event or part of a pattern; (4) Whether it had a significant impact on the research record, research subjects, other researchers, institutions or the public welfare; and (5) Other relevant circumstances.³⁹

³⁶ 45 C.F.R. § 689.1(a)(3).

³⁷ The draft report that we sent to the Subject erroneously here read "knowingly recklessly plagiarized", even though the remainder of the report correctly stated the intent as knowing. We have corrected this error in this final report. ³⁸ 45 C.F.R. part 689.

³⁹ 45 C.F.R. § 689.3(b).

Seriousness

The Subject's actions are a violation of the standards of scholarship and the tenets of general research ethics. Copied text serves to misrepresent one's body of knowledge, presenting reviewers with an inaccurate representation of a proposal's merit. However, the amount of plagiarism is comparatively modest.

Pattern

The plagiarism contained in the NSF proposals display a pattern of plagiarism. In addition, the review of three DoD proposals identified additional plagiarism. Specifically, the first DoD proposal contains roughly 48 copied lines and 2 embedded references; the second DoD proposal contains roughly 70 copied lines and 3 embedded references; and the third DoD Proposal 3 contains roughly 44 copied lines.

Recommendation

Based on the evidence, OIG recommends that NSF:

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.⁴⁰
- Require the Subject to certify to the Assistant Inspector General for Investigations (AIGI) his completion of a responsible conduct of research training program and provide documentation of the program's content within 1 year of NSF's finding. The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include discussion on citation practices.

For a period of two years as of the date of NSF's finding:

- Require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through his institution),
 - o the Subject to submit a contemporaneous certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁴²

⁴⁰ A Group I action 45 C.F.R. 689.3(a)(1)(i).

⁴¹ This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

⁴² This action is similar to 45 C.F.R. 689.3(a)(1)(iii).

The Subject's Response to Draft Investigation Report

We provided the Subject with a copy of our draft report and attachments for comment.⁴³ The Subject submitted a response⁴⁴ in which he argued, among other things, that he did not commit plagiarism knowingly. Crucially, he stated:

More importantly, if I knowingly recklessly plagiarized, why would I reference almost all sources in my proposals? If I knew I was plagiarizing, I should have taken all efforts to hide any information that could be used to trace back to the original sources. The fact that I referenced almost all the original sources shows that I did not intend to plagiarize or knowingly plagiarized.⁴⁵

The Subject had not made this assertion in his previous responses. As explained above, there were eight sources, Sources A-H, from which the Subject copied material. In fact, he cited only Source B in Proposal 1's Works Cited section, in a manner that in no way indicated he had copied text from it. 46 Thus, not only were "almost all" of the sources not referenced in the proposals, but in fact less than 13% of the sources were cited.

The draft report that we sent to the Subject recommended one year of certifications. The Subject's new argument in response to the draft report provides further evidence of the depth of his incomprehension of scholarly standards, as well as a profound lack of candor. Accordingly, we determined that the Subject's response to the draft report increased the seriousness of his misconduct, warranting two years of certifications rather than just one.

⁴³ Tab 9.

⁴⁴ Tab 10.

⁴⁵ Tab 10, Response. Text was bolded in original.

⁴⁶ There was verbatim text in Proposal 2 that the Subject copied from Source F, which is a magazine article that summarizes a journal article (without using text from the journal article)—the Subject did cite that journal article in the Works Cited section, but did not reference the magazine article that he copied the text from.